1. Objectives

The U.S. Department of Education Student Financial Assistance office (SFA) is in the process of implementing a new Financial Management System (FMS) to modernize the student grant and loan management process. The following objectives have been defined to date for the target SFA FMS:

- Comply with the Joint Financial Management Improvement Program (JFMIP) and Modernization Blueprint FMS requirements
- Provide one fully integrated SFA FMS that serves all SFA program areas
- Provide support for financial statement audits at the SFA and Department of Education level
- Eliminate redundant systems and business processes
- Incorporate "Best in Business" practices
- Optimize use of Oracle Financial Applications and other COTS solutions
- Reduce systems operations/maintenance costs
- Allow SFA community easy access to pertinent user information such as loans outstanding, current transactions on the loan, etc., with appropriate security/controls
- Support the goals of Access America
- Allow easy entry and retrieval of data by SFA business partners
- Produce accurate financial results to the SFA community, SFA managers, Education's Office of Chief Financial Officer (OCFO), and Education staff and community
- Maintain a core financial system for control and management purposes

2. Vision

SFA's vision is to implement an integrated Financial Management System that complies with the Joint Financial Management Improvement Program (JFMIP), Modernization Blueprint, and other legislative and regulatory requirements in a timely, effective, and efficient manner.

JFMIP's vision for Financial Management is:

> *"Enabling government to work better and cost less requires program and financial managers working in partnership using modern management techniques and integrated financial management systems to ensure the integrity of information, make decisions, and measure performance to achieve desirable outcomes and real cost effectiveness."*

JFMIP describes the core financial management system as:

"Core financial systems used by federal agencies must comply with specific guidance such as OMB Circular A-127, which requires agencies to utilize a single, integrated financial management system. Guidance is also provided by OMB Circular A-130 which mandates the use of "off the shelf software" to meet financial management needs."

According to JFMIP a single, integrated financial management system means:

"... a unified set of financial systems and the financial portions of mixed systems encompassing the software, hardware, personnel, processes (manual and automated), procedures, controls and data necessary to carry out financial management functions, manage financial operations of the agency and report on the agency's financial status to central agencies, Congress, and the public. Unified means that the system are planned for and managed together, operated in an integrated fashion, and linked together electronically in an efficient and effective manner to provide agency-wide financial system support necessary to carry out the agency's mission and support the agency's financial management needs."

JFMIP describes a financial system as:

"... an information system, comprised of one or more applications, that is used for any of the following:

- *collecting, processing, maintaining, transmitting, and reporting data about financial events;*
- *supporting financial planning or budgeting activities;*
- *accumulating and reporting cost information; or*
- *supporting the preparation of financial statements.*

A financial management system supports the financial functions required to track financial events, provide financial information significant to the financial management of the agency, and/or required for the preparation of financial statements.

A financial system encompasses automated and manual processes, procedures, controls, data, hardware, software, and support personnel dedicated to the operation and maintenance of system functions. A financial system may include multiple applications that are integrated through a common database or are electronically interfaced, as necessary, to meet defined data and processing requirements."

This SFA FMS Vision, is described in more detail below in discrete Financial Management functions. These functions are not meant to be the basis for a systems architecture view, but merely are the requirements associated with the Financial Management functions of SFA. More detail will be provided in the following task of FMS systems design. The FMS financial management functions are:

- Funds Management
- Payment Management
- Receipt Management
- General Ledger Management
- Financial Management Reporting
- Cost Management
- Loan Portfolio Management
- Budget Analysis and Development

3.

Business Capabilities for Financial Management Functions

3.1. Funds Management

The Funds Management function must incorporate all requirements defined as mandatory JFMIP Core Accounting requirements, which consists of: budget execution, funds allocation, and funds control. In addition, this function must also contain all specific SFA Funds Management requirements (e.g. Activity Based Budgeting, Program budget execution, etc.). Unfortunately, the current SFA Funds Management function is, in many cases, disconnected from the existing independent Program systems (Direct Loan, PELL, Campus Based and LEAPP). This lack of "integration" is the primary compliance issue with the Funds Management function and the SFA Financial Management System. Hence, the primary focus of the conceptual SFA Funds Management function must be to establish Funds control (both process and data) throughout the SFA systems/subsystems architecture. Funds control implies the ability to track, record, and limit financial transaction detail both in the core financial management system and in any "to-be" program systems.

In order to establish a more complete Funds management functional requirements document, the Funds management function will be itemized and discussed as follows:

- Budget Execution Process
- Funds Allocation Process
- Funds Control Process / Funds Availability Editing Activity
- Funds Control Process / Commitment Activity
- Funds Control Process / Obligation Activity
- Funds Control Process / Analysis Activity

The following sections will itemize the Funds Management business capabilities requirements. Keep in mind that the SFA organization will need to establish Funds Management processes at a detail level. The detail level will include, but is not limited to:

- Appropriation
- Funding Fiscal Year
- Organization
- Project
- Activity
- Object Class
- Account

3.1.1. Budget Execution Process

Provide the minimum capability to:

- track changes to budget authority at multiple levels of distribution
- track actual amounts (e.g. commitments and obligations against the original and revised budgeted amounts consistent with each financial planning level)
- manage and control prior year funds in the current year, including the capability to identify prior year and current year de-obligations separately

- establish limitations in accordance with Credit Reform objectives for loan programs including program lending limits and available subsidy amounts

3.1.2. Funds Allocation Process

Provide the minimum capability to:

- record funding and related budget execution documents
- record limitations and control the use of funds against them consistent with appropriation and authorization language, Congressional intent, and administrative limitations established by agency management
- distribute, track, control, and report funds authorized at various funding levels, based on the USSGL, accounting classification structure, and cost and project structure
- allow modification of limitations in accordance with apportionment actions, reprogramming, rescissions, and other adjustments
- record and control funds that receive other budgetary authority in addition to appropriations, and identify the type of authority
- record the expiration and cancellation of appropriation authority in accordance with OMB Circular A-34 and the USSGL
- maintain operating plans at or below the funds control level of the classification structure
- allow authorized personnel to reallocate funds at designated levels
- account for budgetary resources at a lower level in the accounting classification structure than they are budgeted

3.1.3. Funds Control Process / Funds Availability Editing Activity

Provide the minimum capability to:

- notify funds availability on-line prior to the distribution of lower level funding and the processing of commitment, obligation, or expenditure transactions
- support the timely recording of funding transactions
- check commitment transactions against available funds. Include adequate controls to prevent the recording of commitments that exceed available balances. Support recording obligations or expenditures that exceed originating document and produce a report or otherwise provide a method that allows management to review the cause of this over-obligation condition.
- establish and modify the level of funds control elements of the classification structure, including Object class, Program, Project, and Fund
- establish and modify the system's response (either reject the transaction or provide a warning) to the failure of a funds-availability edit for each transaction type
- allow authorized users to override funds-availability edits
- record the financial impact of all transactions that affect the availability of funds, such as commitments, liquidation's, obligations, and expenditures
- automatically notify users in real time of transactions failing the funds-availability edit and place the rejected transactions

in an error file and/or suspense account for corrective action. In cases where the actual event has already occurred (such as labor hours worked or a contract already signed), the transaction should be recorded and a warning or report issued to alert the user that follow-up action is needed.

- update all appropriate accounts to ensure that the system always maintains and reports the current status of funds for all open accounting periods
- determine funds availability on adjustments to obligations or expenditures based on whether the funds cited are current, expired, or canceled
- check available funds for obligating documents (including amendments to obligating documents resulting in a change to dollar amounts or to the classification structure)
- check available funds when the expenditure exceeds the obligating document due to quantity or price variances within tolerances, or due to additional shipping charges, etc.
- adjust available fund balances as reimbursable orders are accepted. In the case of reimbursable orders from the public, an advance must also be received before additional funding authority is recorded.
- check available funds for commitments and obligations incurred in support of reimbursable agreements

3.1.4. Funds Control Process / Commitment Activity

Provide the minimum capability to:

- allow commitment documents to be entered into the core financial system on-line and from multiple locations, as well as through interfaces with other systems
- maintain information related to each commitment document, including amendments. At a minimum, the core financial system must capture: requisition number, accounting classification structures, and estimated amounts
- modify commitment documents, including ones that change the dollar amount or the accounting classification structure cited. Invoke funds availability editing for the changed amounts.
- allow for commitment documents to be future-dated, stored, and posted at the appropriate date. Subject these documents to edit and validation procedures prior to posting.
- close commitment documents under the following circumstances: (1) by the system upon issuance of an obligating document, (2) by an authorized user, and (3) as part of the year-end closing if the commitment is in an annual appropriation or in the last year of a multiyear appropriation

3.1.5. Funds Control Process / Obligation Activity

Provide the minimum capability to:

- record obligations based on obligating documents and liquidate, at the user's request, the related commitments, either partially or fully

- record obligations for which there is no related commitment
- maintain information related to each obligation document, including amendments. At a minimum, the core financial system must capture: obligating document number and type; vendor number and other identification i.e., vendor identification number, SSN (Social Security Number), TIN (Taxpayer Identification Number), EIN (Employee Identification Number), and DUNS (Data Universal Numbering System) number; accounting classification structures; referenced commitment (if applicable); and dollar amounts
- allow obligation documents to be entered into the core financial system on-line and from multiple locations, as well as through an interface with other systems
- allow transactions creating anticipated obligation documents to be entered early, stored, and posted at the appropriate date. Subject these documents to edit and validation procedures prior to posting. If the anticipated obligation does not occur, permit the user to delete the transaction without posting it.
- allow multiple commitments to be combined into one obligating document and one commitment document to be split between multiple obligating documents
- allow authorized modifications and cancellations of posted obligating documents
- access on-line all obligations by selection criteria, e.g., document number
- maintain an on-line history file of closed-out documents for a user-defined period of time
- retain (for audit trail purposes) all system record files along with all amendments
- close obligating documents either by (1) the system automatically, upon complete performance/delivery, or (2) an authorized user
- record various intragency acquisition transactions, such as General Services Administration (GSA) Personal Property Center, reimbursable orders, and printing from the Government Printing Office (GPO)
- record and maintain contracts and grants so that fiscal year-to-date and inception-to-date information can be presented
- record Blanket Purchase Agreements (BPAs) and track, control, and monitor records of call.
- track, control, and monitor delivery orders against a contract limitation
- record expenditures related to payments made through use of imprest funds, third-party drafts, and Government credit cards
- record expenditures claimed against advance payments made, such as contract advances and grants

3.1.6. Funds Control Process / Analysis Activity

Provide the minimum capability to:

- maintain current information on commitments and obligations according to the classification structure, on a fund by fund basis
- track the use of funds against operating or financial plans
- report plan to actual at the level of the operating plans
- summarize, compare, and report the operating plans to the appropriate level of funds control
- produce detailed listings and summary reports by the defined level of funds control for those documents that represent commitments, undelivered orders, and expenditures
- establish control features that ensure the amounts reflected in the fund control structure agree with the USSGL account balances at the end of each update cycle
- maintain historical data on all commitment, undelivered order, payable, and payment transactions
- maintain open documents to show the status of commitments, undelivered orders, accruals, and disbursements by document line item
- support commitment accounting based on agency needs

3.2. Payment Management

The Payment Management function will provide a centralized point for disbursing and recording payables. Payment requests and authorizations will be handled by Payment Management. Other systems may support activities which lead up to the payment stage, such as recording obligations and expenditures and establishing payables, but Payment Management depends on the core financial system to manage the payment process itself. According to JFMIP the Payment Management function consists of : payee (vendor) information maintenance, payment warehousing, payment execution, and payment confirmation and follow-up.

Provide the minimum capability to:

- send payment requests directly to Treasury or channel through ED/CFO before going to Treasury
- verify funds availability, record obligations and expenditures, and establish advances and payables (liabilities and expenditures)
- provide appropriate internal control over all payment processes along with a verifiable audit trail
- schedule payments of advances, prepaid expenses, loans, grants, etc.
- record appropriate accounting transactions at the appropriate level of detail
- post entries to the FMS general ledger at a summary or detail level
- inquire on the status of payments in-process
- comply with regulations governing payments, including OMB Circular A-125, “Prompt Payment”, and the Cash Management Improvement Act (CMIA)
- split an invoice into multiple payments on the appropriate due dates for items
- allow for consolidation of multiple payments to a single payee
- support Treasury-specific standards for the format of check and EFT payments

3.2.1. Transaction Types

Types of payment transactions include payments to:

- lenders for interest and special allowance and claims and fees offset by fee revenue
- Guaranty agencies for reinsurance fees and revenue offsets
- schools for loans, grants, and fees
- States for LEAPP funds
- suppliers for goods and services

3.2.2. Vendor File

In order to satisfy SFA requirements, all payments need to be recorded and reported by individual vendors across program systems. This mandates a coordinated **single (virtual) vendor file**. The creation and maintenance of a single vendor file is an important task that is included in the Payment Management function. Ideally, one master vendor file would be created and maintained centrally and would be accessible to any system initiating a payment request. All changes to vendor information would be done in this master file.

Vendors include but are not limited to:

- schools
- financial partners (lenders, Guaranty agencies, States)
- employees (for travel)
- suppliers (for administrative/operational goods and services).

Students are not included in the vendor files being maintained currently. However, thousands of mostly one-time payments for refunds to students may be processed in a day. The need and value of creating a vendor record for each student should be explored further. Considerations include reporting requirements, transaction volumes and auditability.

In addition, the current vendor files store and maintain some payment eligibility information. For example, selective service registration information on a student is collected and maintained. Further research and discussion is needed in order to determine the most efficient and effective way of handling this type of information and whether the vendor file is the best solution.

3.2.3. Netting of Payables and Receivables Balances

Because vendors may also be customers, there is a need to be able to net any outstanding Payables and Receivables balances for a particular vendor/customer. A single balance should be maintained for the vendor/customer.

3.2.4. Loan and Grant Disbursements

Payments to schools for loan and grant funds can be handled by either a Just-in-Time (JIT) disbursement method or by an advance (non-JIT) method. The nature of the financial transactions associated with each

method differs somewhat, as does the timing of the recording of the transactions.

3.2.4.1. Just-In-Time (JIT) Method

Schools using the JIT method will:

- generate disbursement records for students and submit them shortly before the funds are required to be at the school (when disbursement will be made to the student or to the school on the student's behalf)
- receive payments through Treasury
- report any adjustments or cancellations of disbursements in future transactions, as disbursements are netted against downward adjustments when calculating the payment to the school

The receivable for the loan is recorded when the disbursement record is received. It is assumed that the JIT method is the SFA preferred method and that participating schools will be encouraged to utilize this process.

3.2.4.2. Advance (non-JIT) Method

Schools using the Advance method will:

- calculate and request a particular amount of Federal funds needed for disbursements within the next 3 days
- submit a drawdown request
- receive payments through Treasury
- submit a disbursement file to SFA showing the disbursement made to each participant
- report and return any unused funds

These advances (prepayments) are tracked as an SFA asset (advance) until the schools submit the supporting disbursement records. At this time the receivable is created and the asset is credited.

3.2.5. Treasury Interface / Payment Schedules

Payment schedules are created for all payment authorizations sent to Treasury. These schedules are tracked on form SF-224 Statement of Transactions. Confirmations of the payments made by Treasury are maintained in the GOALS system. The confirmation process confirms that payments were made as anticipated. A reconciliation process will also be performed.

3.2.6. Non-payment Information

Some non-payment information is currently being reported through the Payment Management function. This information is needed for reporting

purposes but does not directly result in accounting transactions. An example is the loan portfolio information for Guaranty Agencies. Further investigation is required in order to determine the best way to collect and store this information.

3.3. Receipt Management

The fundamental requirements for the Receipts Management processes include: (a) accounting for receivable activities identified for student loan management, miscellaneous billing, and operational purposes; (b) accepting and accounting for receipts not only for student loan repayment and collection, but also for departmental operational purposes; and (c) maintaining account balances adjusted by daily transactions.

According to JFMIP, the Receipts Management function consists of receivable establishment, receivable management, and collections. To accomplish these functions, Receipts Management must provide the capability to create and maintain customer records, handle offset and interagency/intragency transactions, and allow for reconciliation.

Accounting transactions generated must be in conformance with Department of Education requirements, Account Code Classification (ACC) rules defined in support of Credit Reform (i.e., track by cohort year and risk category) as well as standard Government financial reporting.

3.3.1. Accounts Receivable

The Receipts Management function must provide for creating a receivable when there is an invoice document generated in the Oracle Receivables module. Additionally, it must be able to create a receivable when there is an interfaced document or data feed from an integrated processing system which generates the invoice or billing document. Receivable records may be created for students, schools, financial institutions, other agencies, and employees.

3.3.2. Loan and Grant Processing

Provide the minimum capability to:

- bill or record billing financial transactions for loan billing handled in other agency departments, to include the elements of loan principal, interest, and multiple associated fees (Note: multiple interest rates and repayment plans or schedules must be supported)
- update loan receivable based on changes in loan status (such as in deferment, in forbearance, in debt collection, in rehabilitation, or in cancellation)
- automatically record a receivable upon ED disbursing advance payments to non-JIT schools for loan program drawdowns
- record a receivable for excess cash from non-JIT schools
- record financial receivable transactions for principal, interest, and multiple pre-defined types of penalty fees for default loans returned to ED for bad debt collection either from schools or Guaranty Agencies

- bill or create an offset to schools or a receivable from schools or financial institutions when a case management review indicates funds are owed to ED
- consolidate multiple existing loans, both internal to ED and for specified external agencies, e.g., US Department of Heath and Human Services (HHS)

3.3.3. Revenue Billings

Provide the minimum capability to:

- manually bill for miscellaneous revenue sources which are self-reported by various financial institutions and/or schools

3.3.4. Intragency Transactions

Provide the minimum capability to:

- create and bill receivable transactions for loan consolidation activity
- create and bill receivable transactions for default loan transfers

3.3.5. Interagency Transactions

Provide the minimum capability to:

- create net Online Payment and Collections (OPAC) billing transactions in support of SF 1081 interagency transfers and FMS Form 224 Statement of Transaction Reporting.
- create charge back transactions in support of OPAC interagency transfers and FMS Form 224 Statement of Transaction Reporting
- create and bill receivable transactions for loan consolidation activity

3.3.6. Loan Repayments

Provide the minimum capability to:

- accept and record receipts for loans in repayment and in bad debt collection (e.g., bad debt collections are payments made to Education on loans which have gone into default, and include defaulted Direct Loans, defaulted FISL loans returned to ED for collection, and defaulted FFELP loans returned to ED by Guaranty Agencies for collection)
- separately account for receipts of interest and/or penalties and/or administrative charges
- update account balances for receipts
- adjust receipts in the event of error or non-sufficient funds (NSF)
- waive interest, automatically updating account records
- write-off outstanding balances
- confirm receipts to Treasury

3.3.7. Loan and Grant Program Receipts

Provide the minimum capability to:

- accept and properly account for refunds from schools for loan programs (note: the school account may have shown a receivable balance created by an advance payment disbursed by ED which would require a downward adjustment by the amount of the refund, and result in the funds which were obligated being released (reduced))

3.3.8. Intragency Receipts

Provide the minimum capability to:

- receive payments for loan consolidation

3.3.9. Miscellaneous Receipts

Provide the minimum capability to:

- accept and record receipts for various predefined miscellaneous receipt types, without existence of an associated receivable
- accept and record receipts from unidentified sources of payment
- accept, record, and transfer receipts for fees processed for other agencies

3.3.10. Statements

Provide the minimum capability to:

- automate account transaction summaries for a predefined calendar period, such as a month. Statements generated should include beginning balances, receipts by type of transaction (e.g., billing, receipt, adjustment, waiver, write-off), applicable document numbers, date of transaction, amount of transaction, and account ending balances.

3.3.11. Borrower/Customer Account General Information

Provide the minimum capability to:

- create and maintain student and school level information such as multiple addresses, multiple contact names, and multiple telephone numbers
- enter and maintain ED-specific information on the borrower/customer record, such as loan or grant eligibility status (to include in-school enrollment or re-enrollment status, military duty, unemployment, and death which affect loan repayment status) and Promissory note status information

3.3.12.

Borrower/Customer Account Balances

Provide the minimum capability to:

- view on-line and report current account balances
- store, view, and report the history of transactions by Borrower/Customer account such as loan receivable amounts; loan receipts for principal, interest, penalties and/or administrative fees; transaction adjustments; and write-off transactions
- report aging of receivables by account for account follow-up and debt collection purposes
- record dunning efforts in support of late payment processing (create, send, and record progressive dunning letters automatically and record contact information) on receivable transactions generated directly by the Receipts Management function

3.3.13. Reconciliation

Provide the minimum capability to:

- reconcile account balances, billings, and receipts (to include interagency offsets and OPAC transactions), unidentified receipts, adjustments and write-offs. Reconciliation should occur prior to submitting to Oracle General Ledger (GL).
- reconcile information interfaced into and out of Oracle Accounts Receivable, including to the Oracle General Ledger
- report transaction details and summaries in support of existing and to be defined internal and external reconciliation processes
- report summary transaction data in support of required government reporting (to be defined)

3.4. General Ledger Management

General Ledger Management is the central function of the Core financial system. The general ledger is the highest level of summarization and must maintain account balances by the fund structure and individual general ledger accounts established in the Core Financial System Management function. All transactions to record financial events must post, either individually or in summary, to the general ledger, regardless of the origin of the transaction.

The general ledger is supported by subsidiary ledgers at various levels of detail. These subsidiary ledgers may be maintained within the Core financial system or in other systems. For example, detailed property records supporting the equipment account in the general ledger might be maintained in a system devoted to controlling and maintaining equipment. The payroll system might contain detailed employee pay records which support records of expenditure by object class and organization in the Core financial system, which in turn provide partial support for expenditure and expense accounts in the general ledger.

The General Ledger Management function consists of general ledger posting; accruals, closing, and consolidation; and general ledger analysis and reconciliation.

All of SFA's financial transactions will be posted in the SFA FMS general ledger at the summary level as part of the General Ledger Management function. Accounting entries are captured at the appropriate ACC level as defined by SFA (e.g. Appropriation, Funding Fiscal Year, Project, Program, Account, Object Class, Activity, etc.). All subsystem activity will result in the general ledger having summary level data by Guaranty Agency, school, institution, and State. The subsidiary modules and program subsystems will contain or have access to detail source transactions in order to provide a complete audit trail. Higher level summary financial transaction information will be provided to ED/Office of the Chief Financial Officer's (OCFO) Financial Management System Software (FMSS) for consolidated Department of Education reporting. SFA salary and expenditure information will be interfaced from ED/OCFO's FMSS or from the original source system (i.e. Department of the Interior) into the SFA FMS. Any SFA financial transactions originating in ED/OCFO's system must be interfaced to the SFA FMS to facilitate SFA financial and cost management requirements. The General Ledger Management function will provide the following features.

Provide the minimum capability to:

- post accrual and/or adjusting journal voucher entries as appropriate and month-end and year-end closing entries
- store the statistical and memorandum data to be used for allocation and other performance based measurements
- establish a program structure with sufficient levels of detail to allow reporting for all categories on which budgetary decisions are made
- provide the capability to classify accounting transactions by the following structures: fund, program, organization, project, activity, cost center, object class, and any other data elements needed to meet the data classification and/or reporting needs of the agency
- provide the ability to produce an on-line current status of funds report down to the lowest level of the organizational structure that was budgeted
- provide the capability to run on-demand analysis reports for general ledger accounts within appropriation/fund any time during an accounting period
- provide for a variety of information to support the managerial cost accounting decision-making process, the management of the agency, and external reporting
- maintain historical data to produce comparative financial reports for management use
- incorporate both proprietary and budgetary accounts in the system, and maintain the relationships between accounts as described in the U.S. Standard General Ledger (USSGL).

3.5. Financial Management Reporting

3.5.1. Financial Reporting Key Concepts

Financial Management Reporting must provide ready access to the information contained in the FMS. That information must be easily available and understandable to personnel with varying levels of technical knowledge of systems and financial data. Financial Management Reporting should provide the minimum capability to:

- Allow users to design reports and extract files for their specific requirements, and to perform table look-ups and expansion of codes when needed to clarify the information contained within the reports
- Provide for easy access to historical files for comparative, analytical, and trend information
- Support agency budget, accounting, and financial management
- Provide consistent information for budget formulation, budget execution, programmatic and financial management, performance measurement, and financial statement preparation

The information characteristics, frequency, source, examples, and audience for some categories of reporting are summarized below.

Category	**Information characteristics**	**Frequency**	**Source**	**Examples**	**Audience**
Regulatory Reporting	•Financial data •Pre-determined format •External focus •Historical	•Pre-determined regulatory requirements	•General ledger •Compo-nents of FMS	•Financial statements •Regulatory reports (SF224) •Trial balance	•Congress •ED CFO •Treasury •Dept Managers •OMB
Reconciliation Reporting and Detail Transaction Reporting	•Financial data •Non-financial data •Internal focus •Not used for analysis •Historical	•Organization business cycle •As required	•Compo-nents of FMS	•Audit trails	•Auditors •Dept Managers •ED CFO •Institutions •Schools

Performance Management Reporting	•Financial data and non-financial data (across multiple dimensions – timespans, customer, process, employee, geographical area) •Internal focus •Allows for trend analysis, exception reporting, and standard reporting for monitoring performance and supporting decision making •Predictive	•Organization business cycle •Supports timely decision making	•Data warehouse •General ledger	•Balanced scorecard/ Executive dashboard •Profitability Reporting	•Student •School •Financial partner

3.5.2. Regulatory Reporting

The majority of the regulatory reporting functionality will be addressed through the Oracle General Ledger. The specific reports required for SFA regulatory reporting will be further defined during the conceptual design phase of the project.

3.5.3. Reconciliation Reporting and Detail Transaction Reporting

Reconciliation reporting functionality will be based on specific integration points between the modules of the FMS and will serve to confirm that a process executed correctly. They typically include audit and control and error reports. Reconciliation reporting will be further defined during the conceptual design phase of the project.

3.5.4. Performance Measurement Reporting

Performance measurement is a type of management reporting which answers the question: How do you know how you are doing? Performance measurement is a process which uses Key Performance Indicators (KPIs)

which measure the organization's vision, strategy, and objectives. Simply put, "What Gets Measured Gets Done". There are several measurement types:

- Financial vs. Non-Financial
- Strategic vs. Operational
- Corporate vs. Business Unit vs. Individual
- Daily vs. Weekly vs. Monthly vs. Quarterly vs. Annually
- Lagging Indicators vs. Leading Indicators

Performance management is based on defining appropriate KPI or measurements. The following is a list of some guidelines to consider when defining those measurements:

- Metrics should be externally focused wherever possible
- Metrics should be directly linked to the strategy or the current major priorities of the business
- There should be no more than 10-15 metrics on the scorecard which translates to 2-3 per balanced scorecard components
- Measurements should be aligned in a "cause-effect" relationship.
- Metrics should be updated on a regular basis to account for changes in department dynamics
- Metrics should be clearly defined to ensure a common understanding of what exactly is being measured
- Metrics should meet the following criteria:
  - easily measure at a low cost
  - collected as part of the normal process
  - actionable
  - measurable against past performance and/or competitive/best practice performance
  - resistant to manipulation or gaming
  - differentiated from other metrics
  - easily assigned ownership

The reporting mechanism for a Performance Management system is most often a Balanced Scorecard.

3.5.4.1. Balanced Scorecard

A Balanced Scorecard:

- supplements traditional financial measures with three additional perspectives:
  - Customer
  - Process
  - Employee
- emphasizes a balance across multiple dimensions of performance ensures that good performance in one area is not offset by poor performance elsewhere
- links performance measures and provides answers to four basic questions

- How do we look from a financial point of view? (Financial perspective)
- How do we look to customers and other stakeholders? (Customer/stakeholder perspective)
- What must we excel at? (Core business process perspective)
- How do we continue to improve and create value? (Employee perspective)

3.5.4.2. Examples of KPIs

Many organizations are measuring the following KPIs across key business views.

3.5.4.2.1. Customers

- Customer Satisfaction
- Lifetime Value
- Avg. Service Levels (e.g. Avg. Wait Time in Call Center, Loan Origination Time)

3.5.4.2.2. Employees

- Employee Satisfaction
- Retention
- Cost to Hire
- Training Hours per Year
- Skills or Proficiency Attained

3.5.4.2.3. Financial

- Economic Value Added (EVA)
- Cash Flow
- Return on Equity
- Return on Assets
- Unit Cost
- Default Rate
- Repayment Status
- Cost per Transaction (e.g. Cost per Loan, Cost per Call to Call center)

3.5.4.2.4. Key Business Views

- Student
- School
- Financial Partner
- Customer segment
- Product (FFEL, Pell, Direct Loan LEAPP, etc.)
- Channel
- Geographic Location
- Period Comparisons
- Plan / Forecast Comparisons
- Congressional District comparisons

3.6. Cost Management

A major objective of the new financial environment is to be an operationally excellent, low cost provider of services and products. The new financial management system will need to include a Cost Management capability capturing and reporting on SFA related costs for improved management decision making. According to JFMIP, the Cost Management function consists of cost recognition, cost accumulation, and cost distribution.

Three cost management capabilities are desired. The first is most important for the financial management system cost management focus. The FMS should provide the minimum capability to:

- capture and measure costs associated with product delivery. Activity Based Costing (ABC) is the desired technique to be used. Using ABC, cost is allocated based on the activities which are performed as SFA delivers its products. This results in the ability to analyze and manage component costs associated with many different dimensions of the business.

- track and report on project related activities (e.g., Transformation projects) and their associated costs. Tracking of these costs may be different than the method for arriving at product delivery costs as these activities each have a beginning and an end. The requirement for tracking and managing project related costs should be further investigated against the chosen cost management engine or other applications such as Oracle General Ledger and Oracle Projects.

- manage and report on property. This includes capitalizing and depreciating property assets which may be purchased or developed/built. The tracking of and accounting for construction in progress activities such as system development are important components of property management that should be included in the FMS. These requirements should be further investigated against Oracle Assets or other applications.

3.6.1. Capabilities for Measuring Unit Costs Associated with Product Delivery

The cost management function will need to provide for core capabilities and support objectives outlined on the table below.

Unit Cost information is needed across multiple dimensions (illustrative examples identified below)	**Several objectives can be met with improved cost information**	**Cost information will be utilized by a wide range of users**

1. Product • Direct Loan • FFEL • Pell • Campus Based • LEAPP 2. Channel • Student (incl. Student Type) • School (4-year,2-year, or Proprietary) • Financial Partner/ Customer (GA, lender, State) 3. Region/Geography 4. Organization (Client Account Managers and/or Responsibility Managers or Offices)	1. Reduce operating costs through better understanding of unit or transaction costs and their associated drivers 2. Capture baseline costs associated with activities 3. Provide for comparative reporting against baseline costs and other benchmarks 4. Utilize cost information in planning/budgeting for student, school, and financial partner channels' future activities, in setting priorities, and in improving resource utilization. 5. Understand cost variance by function through: • Analysis of actual costs compared to budget • Drilldown and improved audit trail capability for both financial and non-financial data 6. Identify value added and non-value added costs and identify areas for improvements	1. General Managers for student, school, and financial partner channels 2. Function/process department managers 3. Information Technology Investment Review Board (ITIRB) 4. ED Management 5. General Accounting Office (GAO) 6. Congress 7. Inspector General (IG)

3.6.2. Cost Management Process

The Cost Management process is described below through three components:

- Sources
- Data Handling
- Cost Management Application

3.6.2.1. Sources

Sources include both financial and SFA operational systems. Some examples are listed below.

3.6.2.1.1. General Ledger

Provide the minimum capability to:

- capture and recognize cost (this includes, but is not limited to posting accruals, reducing asset balances, utilizing agency's common accounting classification structure to accumulate and classify cost by type of resource, capture fees/royalties/rent/and other charges, receive and record direct costs incurred, including input costs from feeder systems such as inventory/fixed assets, travel, and payroll, assign indirect costs where appropriate, and provide the audit trail which traces cost assignment)
- keep books of record for schedules and operating statements in support of financial statement preparation and audit
- deliver the cost pools to be used in further cost allocation (e.g., salaries, rent, equipment)

3.6.2.1.2. Program Servicing Systems

Provide the minimum capability to:

- capture and track operational activities and information (e.g., time, hours, etc.)
- provide drivers for cost allocation (e.g., number of aid applications submitted, number of loans, number of loans in collection, etc.)
- report student, school, and financial partner information

3.6.2.1.3.

Payroll

Provide the minimum capability to:

- provide drivers for cost allocation (e.g., Full Time Equivalents (FTEs), employee time/hours, etc.)

3.6.2.2. Data Handling

Provide the minimum capability to:

- validate information being sent to financial management system component (e.g., cost management engine)
- track and route information to appropriate financial management system component (e.g., cost management engine)

3.6.2.3. Cost Management Application

The application will need to support integration and automation of data as well as be flexible to support ongoing updates in response to business change. Additional functions required of the application are identified below:

Provide the minimum capability to:

- define and maintain relationships between resources (cost pools), activities, functions, products (cost objects), and cost drivers
- define activities at the lowest level of definition of work performed. They may be grouped to represent functions and/or processes supporting the delivery of products. Example of functions and/or processes within a product may include: Application Processing, Customer Service, Repayment, Collection, etc.
- invoke rules for cost assignment and calculations based on operational drivers
- generate multi-dimensional cost information based on a variety of allocation methodologies
- combine historical, external, and current cost information
- integrate operational results and assigned or calculated costs needed to support performance measures
- support standard and ad-hoc reporting needs
- forecast and simulate capabilities (e.g., allows user to vary cost model parameters)

3.6.3. Key Principles

Listed below are some key principles to ensure success is achieved when implementing cost management capabilities. Specific activities within future task efforts should support these principles.

- Be uniform and consistent; i.e., obtain common definitions for views, breakdowns, functions, cost drivers, and other cost management terms

- Obtain buy-in from users/audience of the information and data providers
- Provide immediate and easy access to cost information
- Become proactive and predictive rather than reactive
- Ensure the level of detail for cost is meaningful, material, measurable, and manageable (e.g., it may not be appropriate to allocate some costs to a loan product)
- Do not overload the detail

3.6.4. Considerations For Going Forward

Future FMS tasks will need to address the following questions:

- What will be the common definitions for activities, drivers, and cost objects?
- To what level of detail do we want to allocate and manage costs? What are the impacts on current systems, ACC, etc.
- How will the allocated cost information integrate with other performance measurement applications? Other initiatives?
- What level of system customization will be needed?
- What levels of detail and precision will be needed for managing project costing and determine its applicability within the chosen cost management engine?

3.7. Loan Portfolio Management

The Loan Portfolio Management function must establish and report on the financial data associated with all Title IV loan programs. While the data stores for these transactions include NSLDS, CPS and DCS systems, the financial impact of these transactions will be established in the SFA FMS. In order to capture and report on guaranteed and direct loan portfolio information as defined in the Blueprint, the primary financial data necessary to properly manage and track loans are:

- Outstanding principal balances
- Accrued principal and interest data
- Collection data
- Credit Reform data
- Loan type

The Loan Portfolio Management function must provide the minimum capability to:

- identify specific groups of loans by program (for example, FFEL, Direct Loan, Perkins, FISL)
- identify loans by loan type (for example, Stafford Subsidized and Unsubsidized, PLUS, SLS (Supplemental Loans for Students), and Consolidated)
- identify by cohort year

In addition, the Loan Portfolio Management function can be segregated into two major types of Federal loan programs: direct loans and guaranteed loans. The Loan Portfolio Management functions must be able to distinguish, track and report on both types of loans.

Direct Loans
Direct Loans are established and maintained by the Department of Education. These loans must be accounted for as a receivable at the point of loan disbursement.

Guaranteed Loans
Guaranteed Loans are established and maintained by Financial Institutions. These loans are "guaranteed" by a Guaranty Agency identified by Education. In case of default, the loan is "paid" to the financial institution and serviced by the Guaranty Agency. These loans are not considered a receivable to Education until they go into default.

3.7.1. Outstanding Principal Balances

One key financial data element for the FMS will be the outstanding principal balances which must be reported in an accurate and timely manner. This data is required for the JFMIP Memorandum transactions and is critical for the Performance Based Organization (PBO) to establish key performance indicators and track financial management progress.

3.7.2. Accrued Principal Interest Data

The FMS must collect and maintain accrued principal and interest data from the Lenders and GA's in order to maintain accurate financial data. This data must be established and reconciled on a monthly basis and used as a basis for GA and Lender comparisons and performance indicators.

3.7.3. Collection Data

Loan Portfolio Management collection data consists of all Title IV program collections. This data is obviously a strong indicator of the program collection processes and agencies. In the future, SFA will need to collect and compare this information across Programs and institutions in order to maximize collection efforts and minimize operational costs associated with loans.

3.7.4. Credit Reform Data

The Loan Portfolio Management function must also maintain all required Credit Reform data. This data would include, but is not limited to, interest rates, Treasury rates, subsidy amounts and calculations, and default information.

3.8. Budget Analysis and Development

These activities include establishing a baseline budget in which formulating future fiscal year budgets, tracking submissions, and performing budget revisions or modifications can occur. This function will provide budget request information to the Department of Education ED Budget Service office to be included as part of the President's Budget. The new Financial Management System will have the ability

to track the status of the budget request as it moves through the process until enactment of appropriations. It should also allow for the storage of prior year budgets for use in forecasting future budgets.

The integrated standardized budget process will allow for the performance of all budgetary activities inclusive of budget preparation to budget execution processes. The SFA CFO office would receive budget requests from all its activities including the programs. Within the budget development process the expectation on what the schools may request from a particular SFA CFO program should also be included in the SFA CFO budget submission.

The budget analysis process would include the review process performed by the OSFA Information Technology Investment Review Board (ITIRB). Upon completion of this review the SFA CFO office will submit its total budget submission to the ED Budget Service office which will include the budget request as part of the total Department of Education budget request.

The budget execution process involves the planning and tracking of funds and, in conjunction with the Funds Management process, the maintenance of accurate fund balances.

3.8.1. Financial Planning Process

Provide the capability at a minimum to:

- prepare program financial plans at the Appropriation / Limitation (Project), Organization, Funding Fiscal Year, Object Class and Activity level
- prepare financial plans based on multiple measures, including obligations, costs, labor, hours, and FTEs
- automatically generate allotments and sub-allotments (including limitations based on approved changes to obligation-based financial plans) and upload them to the core financial system

3.8.2. Budget Formulation Process

Provide the minimum capability to:

- report for all categories on which budgetary decisions are made, whether legally binding (e.g. appropriation limitations) or in the nature of policy guidance and decision-making (e.g., Presidential/OMB pass-backs, congressional markup documents, or internal agency decisions)
- develop budgets on-line and via upload from spreadsheets
- rollover information, i.e., to establish new data sets at the beginning of each budget cycle, based on prior year budget amounts as well as prior year actuals
- perform projections of obligations, income, and expenditures at any level of the organizational structure, e.g., projecting obligations based on prior periods and applying these to a future period
- distribute budget submission guidance to subordinate organizations electronically

- prepare budget submission guidance, budget narratives, and budget briefing packages on-line and via upload from word processors
- merge narratives, schedules, graphs, and pictures using current technology (e.g., Object Linking and Embedding (OLE))
- support check in/check out, versioning, workflow management, and audit trails for budget-related documents
- establish and maintain multiple budget cycles
- adjust projection rates (e.g., 90%, 110%) and exclude major one-time obligations from projection

4. Organizational Issues

Implementing the technologies, practices and procedures to make the SFA FMS itemized in this document a reality will mean substantial organizational change. This change will also incorporate Education's other initiatives such as the Performance Based Organization (PBO) changes, the Modernization Blueprint goals and a customer / Channel organization structure. In order to mitigate the organizational challenges associated with Education's major restructuring, the SFA FMS organizational challenges should be planned and managed as carefully as the Business capabilities or technological issues associated with this effort. SFA has a change management group in place looking at organizational issues in more depth than this document can address. However, a few of the major organizational issues which impact the successful implementation of a new FMS are:

- communicating the overall vision, mission, and focus of the SFA Financial Management System to everyone in the organization
- sharing results and progress toward commitments and goals with employees, customers, and stakeholders
- encouraging new thinking and behavior that improve current business practices and processes
- clearly assigning and communicating accountability for results
- developing, documenting, installing, and training new policies and practices (e.g., institutionalizing budgeting based on cost drivers or baselines)
- establishing guidelines to ensure data integrity and security

There are several specific supporting activities for the new FMS that will have direct organizational impact. A help desk will be required for the FMS production environment. Personnel will need to be identified and trained, and procedures must be developed and communicated for handling questions and problems regarding the new business system. Also, the overall strategy for the ongoing training of new users (who could also be new employees) of the FMS system must be developed. The ongoing training strategy will probably be a "train the trainer" approach. Trainers will need to be identified, and the required skills should be determined and obtained. Trainers will prepare training plans, develop training materials, and deliver courses. The handling of these activities will require coordination between the FMS team and the change management group.

5.

Technology Issues

The technical strategy for meeting the business requirements and business processes will be in compliance with the enterprise wide standards for the implementation and support of the system. This incorporates all components including the implementation methodology, tools and standards which cover software, hardware and documentation. This Integrated Product Team (IPT) assumes that Oracle Financials will be implemented utilizing an Oracle technology. The implementation of the package will be in compliance with standards for COTS implementations.

5.1. Stovepipe Architecture

One of the primary concerns associated with the current FMS is the existing "stovepipe" systems architecture. This technical architecture has evolved by Program systems developing over time utilizing independent technologies and "stand alone" functionality. Unfortunately, the outgrowth of this approach has resulted in Education's Financial Management Systems becoming both functionally and technically deficient. These deficiencies have been noted and reported on a number of General Accounting Office (GAO) and Audit findings.

5.2. Integrated Systems Development

The solution to this architecture problem need not be a single "monstrous" system. In effect, with proper Integrated Product Teams (IPT) coordination and technology new system development may be tightly integrated. This integration is required for the SFA FMS requirements, identified above, and may be implemented utilizing a combination of Oracle Financial Applications modules, Oracle tools, and any other tools deemed necessary. In particular, an integrated database architecture would establish a significant benefit to the current SFA technological environment. The integrated database architecture would allow for true "integrated" triggered procedures or shared data across multiple applications (including both COTS and custom development).

The Financial Management System (FMS) must integrate with other systems in order to gather all data relating to the overall fiscal management of the Student Financial Assistance office. Integration will be required in order to receive transactions and other information from supporting systems. Also, the FMS will need to send data to certain other systems.

There are many existing programs requiring integration with the new FMS. These include, but are not limited to, ED/CFO's office, other Federal agencies, and Title IV loan and grant programs:

5.3. Implementation Strategy

Implementation of SFA's FMS will require that strategies and approaches be determined for many key areas of supporting technical activities and processes. These must be in compliance with any Federal regulations and will be determined wholly or in part from the other system initiatives within the Department of Education. Some of these key areas are described below.

5.3.1.

Configuration Management

This process includes tasks that help you store, organize, track, and control all components produced by and used in the project for software, hardware, and documentation. This includes source code control for any software development required for extensions, customizations, and product integration.

5.3.2. Implementation Methodology

Implementation of SFA's FMS requires a project methodology to be identified and adopted. This methodology determines the approaches, phases, processes, and tasks for the life-cycle of the project. Also, the methodology will facilitate project planning, scheduling, and execution.

5.3.3. Testing Strategy

A comprehensive testing strategy will be required for the implementation of the new FMS. The testing strategy includes:

- establishing the testing requirements
- determining the testing approach
- identifying the scope of testing activities
- determining the criteria for accepting testing results
- determining how to manage testing errors
- identifying the testing tools and the testing environment

5.3.4. Security Plan

A security plan will identify the high level requirements and policies that affect business and system security, control, and procedures. This will help SFA plan for controlling and maintaining the new system.

5.3.5. Quality Assurance Plan

Throughout the life-cycle for the implementation of the new FMS, quality assurance is imperative. The quality plan should include the identification of specific processes and tasks needed to plan, control, and improve quality.

5.3.6. Design Standards

The standards that designers will follow when designing any extensions to the FMS modules must be defined. Clear and detailed design standards help to make sure that all designs are in a consistent format and include the appropriate level of detail. Design standards will help to enforce a high level of quality.

5.3.7. Development Environment

The development tools that will be used during the extension development process should be identified and communicated. Also, the development

environment including servers, applications, and infrastructure must be determined.

At least three instances of Oracle Applications will be required and maintained. These will be used for development, testing, and production.

5.3.8. Hardware and Telecommunications Support

The implementation of the new FMS will require hardware and telecommunications support from appropriate groups within ED.

5.4. JFMIP Core Technology Requirements

JFMIP describes agency financial systems as:

"... information systems which track financial events and summarize information to support the mission of an agency, provide for adequate management reporting, support agency level policy decisions necessary to carry out fiduciary responsibilities, and support the preparation of auditable financial statements. Agency financial management systems fall into four categories: core financial systems, other financial and mixed systems (including inventory systems), shared systems, and departmental executive information systems (systems to provide management information to all levels of managers). These systems must be linked together electronically to be effective and efficient. Summary data transfers must be provided from agency systems to central systems to permit summaries of management information and agency financial performance information on a government-wide basis.

Subject to government-wide policies, the physical configuration of financial management systems, including issues of centralized or decentralized activities, processing routines, data, and organizations, is best left to the determination of the agency to decide the optimal manner in which to support the agency mission.

The physical design of the system, however, should correlate the agency's organizational philosophy, the technical capabilities available, and the most appropriate manner to achieve the necessary single, integrated financial management system for the agency."

Also, JFMIP says that:

"... financial management system development and implementation efforts shall seek cost effective and efficient solutions as required by OMB Circular A-130, "Management of Federal Information Resources." Agencies are required to use commercial-off-the-shelf (COTS) software to reduce costs, improve the efficiency and effectiveness of financial system improvement projects, and reduce the risks inherent in developing and implementing a new system; however, as stated previously the agency has the ultimate responsibility for implementing sound financial management practices and systems and cannot depend on a vendor or contractor to do this for them. "